



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
P.O. Box 1517  
Alexandria, Virginia 22303-1517  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/001,429	10/30/2001	Alexander Frey	32226.14	2402

7590 05/01/2003  
Craig M. Gregersen  
Briggs and Morgan, P.A.  
W2200 First National Bank Bldg.  
St. Paul, MN 55101

EXAMINER

HOANG, HUAN

ART UNIT PAPER NUMBER

2818

DATE MAILED: 05/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.	Applicant(s)
10/001,429	FREY, ALEXANDER
Examiner	Art Unit
Huan Hoang	2818

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
 Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 15-20 is/are allowed.
- 6) ☐ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All b) ☐ Some c) ☐ None of.
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                         | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)         |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8 | 6) <input type="checkbox"/> Other   |

## DETAILED ACTION

### *Specification*

1 The disclosure is objected to because of the following informalities:

The use of a preamble of a patent claim (page 1, line 9-10) for describing the invention is unclear since the patent disclosed in the specification is unknown and it is not consistent to refer the invention to a patent claim.

Appropriate correction is required.

### *Information Disclosure Statement*

2 The information disclosure statement filed 12/27/02 contains a Japanese Patent document that fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the name of the inventor is missing and there is no explanation of relevance. Accordingly, the document has not been considered.

### *Claim Rejections - 35 USC § 102*

3 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent

4. Claims 1-6, 9/(1-6), 10/(1-6), 10/9/(1-6), 11/(1-6), 11/9/(1-6), 11/10/(1-6), 12/(1-6), 12/9/(1-6), 12/10/(1-6), 12/10/11(1-6) are rejected under 35 U.S.C. 102(a) as being anticipated by the admitted prior art.

The admitted prior art (Fig. 2) shows a read/write amplifier for a DRAM memory cell (15) having all the elements as recited in claims as follows.

- at least one bit line (12) and at least one reference bit line (13);
- the first read/write amplifier (left amplifier 20);
- the second read/write amplifier (right amplifier 20);
- the individual components (21, 22, 23, 24 and 25) divided between the two read/write amplifier elements (20).

#### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Shimohigashi (US Patent No. 4,367,540 cited by applicant).

The only difference between claims 1-14 and the admitted prior art (Fig. 2) is the connections of the bit line pairs to both read/write sense amplifier elements. However, Shimohigashi discloses the use of a bit line pair connected

to both sense amplifiers at two ends of the bit line pair for externally deliver an amplified output from either of the pair of sense amplifiers (column 1 Summary of the Invention)

### ***Allowable Subject Matter***

7. Claims 15-20 are allowed.

Claims 15-20 recite a method for evaluating DRAM memory cells of a DRAM memory having some steps that are not found in the prior art, such as steps e)-g). The advantage of the invention is to use a single read/write amplifier simultaneously to evaluate a plurality of bit line pairs in a single memory cell array.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tanaka et al. discloses a semiconductor memory device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huan Hoang whose telephone number is (703) 305-3494. The examiner can normally be reached on Mon-Fri 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David C Nelms can be reached on (703) 308-4910. The fax phone numbers for the organization where this application or proceeding is

Art Unit: 2818

assigned are (703) 872-8318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Huan Hoang  
Primary Examiner  
Art Unit 2818

HH  
April 29, 2003